

# Watershed Connections

Delivering News to the Carson River Watershed Community



Photo By: Shane Fryer  
Orange Tree Productions Filming  
Lynn Zonge by the Carson River.

Summer 2017

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Scan to be directed to our website:



[www.cwsd.org](http://www.cwsd.org)

## CWSD Floodplain Conservation Videos Debut!

By: Debbie Neddenriep, CWSD

Carson Water Subconservancy District (CWSD) is delighted to debut its “Floodplains as a Community Asset” video series. Inspired by similar videos created by Colorado’s Urban Drainage and Control District, our goal is to underscore the critical importance of conserving the Carson River Watershed’s remaining floodplain, with an emphasis on maintaining the undeveloped nature of our watershed’s rivers and streams.

Created with funding from FEMA’s 2015 CTP “Cooperating Technical Partners” program, these videos aim to increase flood awareness, promote the importance of reducing flood hazards, and spur community action to conserve the Carson River Floodplain. The videos support CWSD’s overarching objective of informing watershed residents, policy makers, and developers on the importance of preserving the Carson River Floodplain and will be utilized in flood awareness outreach and education efforts throughout the watershed.

**Please Click the links below to view our four videos:**

[Public Service Announcement \(PSA\) - Conserving the Carson River Floodplain as a Community Asset \(:30\)](#)

[Agriculture’s a Good Fit for Conserving the Carson River Floodplain as a Community Asset \(4:31\)](#)

[A Case for Developers to Conserve the Carson River Floodplain as a Community Asset \(3:13\)](#)

[Our Officials in Conserving the Carson River Floodplain as a Community Asset \(4:19\)](#)

The videos provide a strong case for watershed communities to preserve floodplains and support conservation efforts in the Carson River Watershed. They provide vital information to our community planners and local officials, empowering them to make informed land use and ordinances decisions that encourage public safety by keeping our floodplains open and undeveloped. A desired result of this project is increased funding from federal, state and local budgets for floodplain preservation projects such as open space acquisition, conservation easements, and ecosystem service incentives.

The CWSD would like to thank **everyone** who made these productions possible! Let’s continue to work together to protect the Carson River Floodplain as a Community Asset!

## Western Pond Turtle Habitats, Home Ranges, and Demographics in Nevada's Carson River

by: Mark Enders, Nevada Department of Wildlife



Adult western pond turtle with a radio-transmitter attached to its carapace. Photo by: Jason Jones

The western pond turtle (*Actinemys marmorata*) is the only native freshwater turtle in Nevada. It occurs primarily west of the Sierra Nevada and Cascade mountain ranges, but isolated populations occur in short stretches of the Carson and Truckee rivers in western Nevada, including at the River Fork Ranch, an 800-acre preserve owned and managed by The Nature Conservancy (TNC). The property lies near the confluence of the east and west forks of the Carson River, and contains extensive wetland and riparian habitats. In 2016, Nevada Department of Wildlife (NDOW) teamed up with TNC to conduct a trapping and radio-telemetry study to learn more about the general ecology of western pond turtles in the Carson River watershed.

NDOW biologists and several volunteers spent 11 days trapping and processing turtles at the River Fork Ranch during June and September 2016, during which time we recorded data for 118 different turtles. We also affixed small radio-transmitters to 15 pond turtles and tracked their movements for four months.

We were able to learn a lot about their population demographics, habitat use, and movement patterns in the Carson River watershed. For instance, we learned that there

are a high percentage of males in this population, as we captured 81 males, 23 females, and 14 juveniles. A high percentage of those were older turtles, but we also know that reproduction is occurring because we captured females carrying eggs and also observed two hatchlings during the study. Among the most interesting things that we learned is that this pond turtle population is capable of long-distance movements (up to 4.3 km). Males moved greater distances (mean = 2.3 km) than females (mean = 1.1 km) or juveniles (mean = 1.4 km), and different individuals appeared to show specific preferences for inhabiting rivers or ponds.

In 2017, we plan to expand our study to other reaches of the Carson River, as well as TNC's McCarran Ranch on the Truckee River. We will collect blood samples from these locations to add to the 41 samples that we collected at the River Fork Ranch in 2016 in order to learn more about the genetic makeup of Nevada's pond turtles, including their genetic origins and degree of isolation. We have much more work to do, but this collaborative study with TNC is already a great first step toward learning more about an isolated turtle population in a variable desert environment. Also see more information on Western Pond Turtles and TNC at <https://www.nature.org>.



NDOW biologists and TNC volunteers processing western pond turtles at TNC's River Fork Ranch in June 2016. Photo by: John Humphrey



## Carson River Coalition: 2017 is off to an Eventful Start

By: Shane Fryer

Photos By: Shane Fryer



East Carson Rafting Trip

Why should you take part in the CRC “Carson River Coalition? “2017” is all I need to say. The CRC started 2017 with a EPA-NDEP coordinated bus tour covering the Carson Mercury Superfund Site in February. The tour was followed by a Remedial Superfund Workshop, then a 2-day Watershed Management Forum. The TED Talk styled forum hosted 20 presenters and covered a variety of topics relevant to the Carson River.

June brought our annual “Get on the Bus” tour. Forty-seven attendees spent 2 days traversing the watershed, from the Sierra to the Sink. More than 30 researchers, conservationists, and water managers engaged participants along the way. Finally, in July the CRC took 47 partners down the Carson’s East Fork rapids. Paddlers spent the day connecting with land managers while floating on this wild-undammed reach.

The year’s only half over, and there’s more to come! Follow us on [Facebook](#), read our [newsletters](#), and sign up for [our Email list](#). The CRC is turning 20 next year, be the first to know about the next big event!



Get on the Bus  
Stillwater NWR

**April 29 – May 2, 2018 | Lake Tahoe, California**

**[www.rivernetwork.org](http://www.rivernetwork.org)**



***River Rally, hosted annually by River Network, is a national conference for river and water champions. River Rally brings together hundreds of people from across the United States and the world who care about rivers and water issues.***

## Changing Roles at River Wranglers!

### Meet River Wranglers' New Director!



Will Sheppard: New River Wranglers Director

Please join CWSD to welcome Will Sheppard as the new Director of River Wranglers. Will recently relocated from Brooklyn, NY, where he spent the last 5 years teaching high school biology, earth science and physics. Prior to teaching high school, Will worked as a park naturalist, environmental educator, and wildlife technician. He received a BA - Environmental Studies from Oberlin College, and an MA-Middle Childhood Education from Brooklyn College. His skills and education will serve him well with River Wranglers! In his spare time, Will fishes, hikes and cooks with his wife and dog. He is excited to get to work for the River Wranglers helping to conserve the Carson River. We all look forward to working with you Will!

### Linda Conlin, Steward of the Carson River for More Than 23 years, Retires as River Wranglers' Director

By Brenda Hunt and Mary Kay Wagner



Linda Conlin's infectious enthusiasm and clear delivery of watershed knowledge has empowered thousands of youth and adults in the Carson River basin to become watershed stewards for over two decades. Linda has been Director and Lead Educator of River Wranglers for the past 23+ years, and what a run it has been!

In 1994, Linda spearheaded the creation of "River Wranglers" with a grant from the University of Nevada - Reno. The grant secured \$15,500 to determine youth interest in water quality monitoring in central Nevada. The program's initial goals to integrate water quality monitoring of the Carson River into high school science programs and to provide field experiences along the river for students in rural communities were successful. So when the grant funds were exhausted, Linda continued to volunteer and kept the organization intact.

In October 2000, River Wranglers incorporated as a 501c (3) non-profit organization with the mission "to explore, conserve and celebrate our rivers through community programs, projects, and hands-on education." Since then, Linda has

developed environmental education (EE) opportunities to increase knowledge and understanding about Nonpoint Source Pollution (NPSP) and watershed stewardship for students, educators, service groups, and the general public. Her work built key partnerships with local schools, clubs, and service



Linda Conlin Photo By: Sarah Muskin



(Continued from page 4)

organizations throughout the Carson River watershed.

As EE Coordinator for the Carson River Watershed, Linda expanded EE Programs such as Conserve the Carson River Days, Trout in the Classroom, classroom environmental education including The History Trunk, and field experiences for students and adult learners annually. Over 30,000 children have participated in Carson River Workdays in the past 20 years. This EE program is a unique opportunity for students to learn about the hydrologic cycle; analyze water samples for pH, temperature, and turbidity; collect and identify macro-invertebrates; and learn about animals that live along the river. As an exemplary educational program, high school students are trained to mentor and teach their younger peers. Many previous elementary students become high school mentors to a new generation of environmental stewards.

River Wranglers collaborates with a myriad of partnering agencies including local public and private schools, school boards, youth organizations, counties, conservation districts, The Nature Conservancy, University of Nevada Cooperative Extension, GREENevada, NDEP, NDOW, US Forest Service, US Fish and Wildlife Service, Nevada State Parks, private ranchers, adult volunteers, and Carson Water Subconservancy District.

River Wranglers' is truly a heart made legacy all its own. Linda has shared her passion and enthusiasm about Nevada's Rivers for 23+ years. Her unwavering dedication and tireless advocacy for the Carson River watershed continues, and even in retirement Linda plans to volunteer more.

Thank you, Linda, for your amazing attitude and your immense contribution to our youth, the Carson River Watershed and Carson River Coalition. We will miss you, but look forward to working with Will Sheppard, the new River Wranglers Director, and you in your new capacity as a River Wranglers Board member and volunteer extraordinaire!!! Life **IS** good!

*"As for my plans after retirement I plan to volunteer as a River Wranglers board member; however, you will mainly find me quilting, planting flowers in my yard, and tending my bees. I plan to join friends on day hikes, camp, and spend time with my grandkids living in Reno, Seattle, Oregon and Bahrain. You'll find me lingering over a morning cup of coffee or a steaming cup of hot tea sweetened with honey, with a good book in hand. I am so appreciative and grateful for all the friendships I've made through River Wranglers and all the support given to our small organization through the years. Special thanks to my co-workers Becki and Sarah, our board members and my replacement Will. Hopefully my retirement will inspire Bill, my husband of 48 years, to quit working and join me. Life is good!" – Linda Conlin, July 2017*



Carson River Work Day with Linda Conlin Photo By: Mary Kay Wagner

## A Recreation Revival On the Carson River

By: Shane Fryer

Photos By: Shane Fryer

With the drought broken, Carson River's waterways are revitalized and a great place to recreate!

The "Carson River Rat" a once elusive critter has now jubilantly returned to the river. Stroll along Carson City's open space and you will see families playing on the river, kids in innertubes, kayaks floating by, and fishermen wetting a line. Since early spring rafts continue to launch daily on the canyons of the East Fork and



Float along Silver Saddle Ranch, Carson City



Easy Paddle Near Fort Churchill, Lyon County

Carson River, braving these reaches' challenging rapids. Further down canoeists leisurely ply the waters through Dayton and Fort Churchill. Shaded boat camps along Lake Lahontan bustle with activity, while the cotton wood galleries and dense willow thickets give nature lovers much to enjoy.

The Carson River is an amazing community resource. The river replenishes our aquifers, irrigates our food, and provides an incredible source of leisure. So, it's up to all of us to

conserve it! Let's keep the Carson safe, open, and clean.

Here are a few tips to recreate safely and cleanly:

- ◆ Every youth and adult should **wear** a life jackets when recreating on any deep waterbody.
- ◆ Currents aren't always apparent in rivers and can be very strong.
- ◆ Sagging limbs and downed trees should always be avoided. They create traps called strainers that can pin you underwater even in shallow settings.



Kayaking Hope Valley, Alpine County



Break From Running East Carson Rapids, Douglas County

- ◆ Always respect private property. Plan where to enter and exit the river so as not to trespass.
- ◆ Finally clean up after yourself...and others. If you see any trash, pick it up. The amount of litter being left along the Carson this year is quite appalling. Please report trash dumps to county officials and support "clean up mobs" and other efforts to keep our river clean and enjoyable for all.

The Carson River's water helps grow our food, our economy, and our passion, but only if we take care of it. Let's work together to make the Carson River Watershed a great place to live, work, and play!



## Headwaters Events

By: Alpine Watershed Group

### 18<sup>th</sup> Annual Markleeville Creek Day



**Saturday, Sept. 9<sup>th</sup>  
9:00am-2:00pm**

*An Alpine County watershed  
restoration work day*

**For more information:**

[www.alpinewatershedgroup.org](http://www.alpinewatershedgroup.org)

[www.facebook.com/alpinewatershedgroup](https://www.facebook.com/alpinewatershedgroup)

**or**

Contact Sarah Muskin: [awg.snap.ed@gmail.com](mailto:awg.snap.ed@gmail.com)

or 530-694-2327

The Alpine Watershed Group will be hosting the 18<sup>th</sup> Annual Markleeville Creek Day on Saturday, September 9, 2017. Volunteers are needed to help complete projects throughout the East and West Carson Watersheds including plantings, stream bank stabilization, invasive weed removal, protective tree wrapping, and storm drain stenciling. All are welcome to attend. No experience is necessary.

Participants will gather in the Markleeville Library Park at 9am for registration. Groups then carpool to their restoration project locations. The Alpine Watershed Group is a non-profit organization whose mission is to protect and enhance Alpine County watersheds. For more information about this event and to sign up, visit:

<http://www.alpinewatershedgroup.org/creek-day>  
or contact Sarah Muskin at  
[awg.snap.ed@gmail.com](mailto:awg.snap.ed@gmail.com) or (530) 694-2327.

The 4<sup>th</sup> Annual Alpine Aspen Festival will be held on October 7<sup>th</sup> and 8<sup>th</sup> in scenic Hope Valley, California. The Alpine Watershed Group and Friends of Hope Valley host the Alpine Aspen Festival to celebrate Alpine County's beautiful fall colors, natural environment, and dynamic history. Visitors may enjoy live music, guest speakers, and booths at the festival location on Blue Lakes Road, or sign up for one of the many activities and workshops with local experts. The festival welcomes families and is also dog-friendly. Space is limited for activities and workshops, so reserve your spot now!

Visit our website at [www.AspenFest.org](http://www.AspenFest.org) for more details and to sign up for an activity. All proceeds from the festival benefit the Alpine Watershed Group, a 501 (c)(3) nonprofit organization whose mission is to preserve and enhance Alpine County's watersheds for future generations.



**CELEBRATE THE FALL COLORS  
AND THE SOURCE OF YOUR WATERS - FROM TREES TO TAP**

**Alpine Aspen Festival**  
Alpine Watershed Group & Friends of Hope Valley

**OCTOBER 7<sup>TH</sup> & 8<sup>TH</sup> 2017 - 10AM-4PM**  
AT BLUE LAKES ROAD IN HOPE VALLEY, CA

FLY FISHING • HORSEBACK RIDING • PHOTOGRAPHY TOUR  
ASPENS • MINING HISTORY HIKE • PAINTING CLASSES

**FREE ADMISSION! FREE LIVE MUSIC! FAMILY & DOG FRIENDLY!**

**VISIT BEAUTIFUL ALPINE COUNTY!  
RESERVE YOUR ADVENTURE TODAY**  
[www.AspenFest.org](http://www.AspenFest.org)

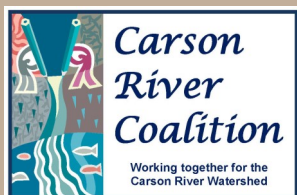
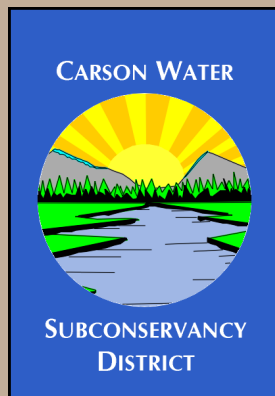
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Alpine County Chamber of Commerce and US Forest Service.

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This newsletter has been developed in part with Clean Water Act 319 (h) funds from the Nevada Division of Environmental Protection.



## Upcoming Events

**Rural Character Photo Contest** (Douglas County images only!) Submissions due August 1-31. Cash prizes! Sponsored by UNCE and GreenActNV. For more info visit: <https://douglascountruralphoto.wishpond.com/2017dcphtphotocontest/>

**August Events at Fort Churchill State Park!** Join Park Staff Gold Prospecting, Investigating Insects, or Junior Gardening! For more information visit: <http://parks.nv.gov/events/august-events-at-fort-churchill>

**August Events at Dayton State Park!** Join Park Staff on a Starry, Starry Night and/or a Slideshow tour of the Carson River. For more information visit: <http://parks.nv.gov/events/august-events-at-dayton>

**August Muscle Powered Events in Carson City, NV.** For more information visit: <https://musclepowered.org/calendar/> August 25 and September 22

**Star Party at River Fork Ranch**  
For more information visit: <https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/nevada/events/star-party-on-the-carson-river.xml>

**September 9, 2017**  
**Markleeville Creek Day**  
9am till 2pm  
Contact (530) 694-2327 or <http://www.alpinewatershedgroup.org/creek-day>

**October 7- 8, 2017, 2 Days**  
**Alpine Aspen Festival**  
Hope Valley, CA  
[www.AspenFest.org](http://www.AspenFest.org)

**April 29 – May 2, 2018,**  
**River Network's 4-Day River Rally** is in our backyard this year!  
**Early Registration Opens Dec 1, 2017**  
[Register Here](#)



**CARSON WATER SUBCONSERVANCY DISTRICT**  
777 E. William St., #110A  
Carson City, NV 89701